DOCUMENT RESUME

ED 307 330 TM 013 491

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TITLE Obtaining a 90% Response Rate in Survey Research through Dillman's Total Design Method.
PUB DATE Mar 89
NOTE 20p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, March 27-31, 1989).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Data Collection; *Mail Surveys; *Principals; *Research Methodology; School Surveys; Secondary Education; *Testing Problems
IDENTIFIERS *Response Rates (Questionnaires); Total Design Method (Dilman)

ABSTRACT

An ex post facto study involving a survey of exceptionally good and exceptionally problematic principals of Ohio secondary schools was undertaken to assess a method of obtaining a high response rate. The sample included 50 subjects (31 principals of good schools and 19 principals of problem schools), representing 7% of the 720 secondary schools in the state. Using a classic reputational analysis, 10 experts nominated the subjects. Focus was on analyzing the reports of these principals regarding interactions with the external environment. The questionnaire, which was designed specifically for the study, was pilot tested via a mail survey and interviews. Questionnaire format is described in detail. The study used Dillman's Total Design Method for Mail Questionnaires, which is outlined briefly. Five contacts via the mail and telephone spanned 8 weeks, 4 days. Data were analyzed using discriminant analysis. A 90% response rate was achieved. The five letters used in association with the mail survey instrument are appended. (TJH)

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OBTAINING A 90% RESPONSE RATE IN SURVEY RESEARCH THROUGH DILLMAN'S TOTAL DESIGN METHOD

PAPER PRESENTED AT THE
AMERICAN EDUCATIONAL RESEARCH ASSOCIATION CONFERENCE
SAN FRANCISCO, CALIFORNIA
MARCH 27-31, 1989

SESSION 38.42
SURVEYS: A BROAD PERSPECTIVE

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The attached documents further explain efforts that led to a 90% response rate a dissertation titled, Principals in Good and Problem Secondary Schools in Ohio Report Interactions with the External Environment. The study was conducted by Dr. Leslie F. Brady through The Ohio State University Department of Educational Policy and Leadership under the guidance of Dr. William W. Wayson. The process to maximize response rate came from the following: Dillman, Don A. (1978). Mail and Telephone Surveys: The Total Design Method. N.Y.: John Wiley and Sons.

The sample included exceptionally good principals and exceptionally problematic principals of secondary schools. One could assume that the two groups would respond at different rates. The fact that both groups responded about equally throughout the process is indicative of the strength of Dillman's Total Design Method.

The sample for the study was small, totaling 50 subjects. The number of subjects were acceptable for the research design, discriminant analysis. Yet the results of the study depended on a high response rate.

The first attachment details the research design. Table 1 offers the mailing schedule. Table 2 indicates the response pattern.

The next group of attachments represents the letters which accompanied each mailing. The only mailing not included in the packet is the postcard reminder sent one week after the initial mailing.

The final attachment is the thank you letter which accompanied the incentive.

These specific documents are provided as examples which lead to a 90% response rate. The final authority on Mail and Telephone Surveys: The Total Design Method is D.A. Dillman.

RESEARCH DESIGN

The purpose of the study was to analyze the reports of principals of good secondary schools and principals of problem secondary schools in Ohio regarding interactions with the external environment.

Sample

The study surveyed two samples of public secondary principals in Ohio: principals of good secondary schools and principals of problem secondary schools. The sample contained 50 subjects: 31 principals of good schools and 19 principals of problem schools. This number comprised 7% of the 720 secondary schools in the state.

Subject Selection

Ten educational experts nominated the subjects, a classic reputational analysis (Hunter,1953). These experts were knowledgeable in the area of secondary schools, and knew about particular secondary schools. The nominators had an excellent reputation as educational leaders in the Midwestern state.

The scope was limited to a single Midwestern state due to the nature of the nomination procedure. Experts familiar with secondary schools on a national scale would be difficult, if not impossible, to locate.

Each expert nominated independently. Only those principals and schools nominated by more than one expert were included in the study. Many of the subjects were nominated numerous times.

Design of Study

The data analysis was discriminant analysis. Discriminant analysis determines the ability to differentiate between two or more groups based on the variables in the study. The two groups consisted of principals of good schools and principals of problem schools. The variables included a.) actions principals take in relationship to the environment, b.) vision, c.) efficacy, and d.) demographic characteristics of principals and school situations.

The research was ex post facto in nature. The inquiry asked principals to report previous interactions with the external environment. The research was a one

shot case study, analyzing the responses of principals on a questionnaire.

The research was not experimental in design. Reputational analysis, rather than random sampling, served as the means of subject selection. The selection process was an important aspect of the study because it afforded two very different groups for analysis.

Questionnaire Development

A questionnaire was designed specifically for the study. An extensive literature review provided substance for the questions. The questions were designed to address each of the variables under study. Once formulated, the questions were examined to enhance clarity and understanding. Numerous drafts and revisions followed these efforts.

Reliability and Validity of the Questionnaire

A pilot test was conducted, consisting of two types of data collection. Ten secondary principals participated in this test. Sixty percent of the pilot group received the questionnaire by mail, completed the questions and

added comments. The remaining forty percent completed the questionnaire in the presence of the researcher, discussing their interpretations of the instrument. From the latter group, the researcher gathered both verbal and nonverbal input. The responses from the full pilot test were analyzed to calculate the reliability of the instrument.

A panel of experts reviewed the questionnaire. They analyzed the instrument in light of the literature and knowledge base. This served as a validity test.

Questionnaire Format

The printed questionnaire was 6 inches by 8 1/2 inches. The cover was on gray parchment card stock. The front cover included a two color design - red and black. The questionnaire contained 16 pages and 36 questions. It was organized so the most consuming questions fell on pages 2 through 5, enhancing the likelihood of full completion once this time investment had been made.

The questionnaire was mailed in a white envelope measuring 6 1/2 inches by 9 inches. The return envelope was addressed and stamped.

As an incentive for completing the questionnaire, the subjects were promised the Handbook for Developing Public Confidence in Schools published by Phi Delta Kappa. Those who responded could also receive a copy of the results, if they requested.

Procedure

The investigation employed Dillman's Total Design Method for Mail Questionnaires. The schedule, suggested by Dillman, was followed. The five contacts spanned 8 weeks, 4 days. The process is listed in Table 1.

Table 1

Mailing Schedule for the Questionnaire

1st mailing Letter & Questionnaire	2/16/88
Postcard reminder One week later	2/23/88
Follow up Three weeks later Letter & Questionnaire	3/8/88
Follow up Five weeks later Sent by registered mail Letter and Questionnaire	3/21/88
Follow up Seven weeks later Phone call personal conversation with subject (one exception)	4/6/88 and 4/7/88
Closed process Total Time - 8 weeks, 4 days	4/16/88

Appendix A contains the letters referenced in Table 2. Every letter was personalized, printed on university stationery, and signed in blue ink.

The response rate for the study was 90%. Of the fifty subjects in the study, 45 responded. The pattern of responses is listed in Table 2.

Table 2

Pattern of Responses

1st mailing	60% responded
30 responses/ 50 subjects	
3 week follow up	25% of remaining
5 responses/ 20 remaining subjects	
5 week follow up	60% of remaining
9 responses/ 15 remaining subjects	
7 week follow up	17% of remaining
1 response/ 6 remaining subjects	

Statistical Analysis

Discriminant analysis was the statistical technique employed for studying the differences between the two groups with respect to the variables. It answered the following questions:

1. How well do the variables of the study discriminate between principals of good schools and principals of problem schools?

2. Which of the variables are the most powerful discriminators between principals of good schools and principals of problem schools?

Each variable was further studied to glean information about the nature of the differences between

principals of good schools and those of problem schools. The analysis of the variables was based on substantive hypotheses.

Each question was viewed in terms of the similarities and differences of the responses between the principals. This offered a variety of specific information which lead to implications for practicing administrators.

LETTERS ACCOMPANYING QUESTIONNAIRE

February 16, 1988

^F1^
^F2^
^F3^

Dear ^F4^:

You can help us learn how principals in secondary schools in Ohio work with the central office and the community.

We selected fifty secondary school principals representing various situations to tell us how they work with the central office and the community. We feel YOU can make a unique contribution. It is important that we get your input. It is also important that you complete every item.

You may be assured of complete confidentiality. The questionnaire has an identification number ONLY to help us know when your questionnaire is returned. Your name will never be placed on the questionnaire or used in any other phase of this study.

You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

To thank you for completing the questionnaire, we will send you a complimentary copy of The Handbook for Developing Public Confidence in Education when it becomes available from Phi Delta Kappa this Spring.

We are willing to answer any questions you might have. Please write or call. The information is below.

Thank you for your assistance.

Sincerely,

William Wayson, Professor
Educational Policy and Leadership
The Ohio State University
301 Ramseyer Hall
Columbus, Ohio 43210
(614) 292-7700

Leslie Brady
Research Assistant
11201 St. Rt. 362
Minster, Ohio 45865
(419) 628-2239

March 8, 1988

^F1^
^F2^
^F3^

Dear ^F4^:

About three weeks ago we wrote to you seeking your opinion of how principals in secondary schools in Ohio work with the central office and the community. As of today we have not yet received your completed questionnaire, although over 60% of the responses are in.

We are writing to you again because of the significance each questionnaire has to the usefulness of this study. You were selected because we feel that you can make a unique contribution. In order for the results of this study to be truly representative it is essential that you return your questionnaire.

To thank you for completing the questionnaire, we will send you a complimentary copy of The Handbook for Developing Public Confidence in Education when it becomes available from Phi Delta Kappa this Spring.

In the event that your questionnaire has been misplaced, a replacement is enclosed.

We are willing to answer any questions you might have. Please write or call. The information is below.

Your cooperation is greatly appreciated.

Sincerely,

William Wayson, Professor
Educational Policy and Leadership
The Ohio State University
301 Ramseyer Hall
Columbus, Ohio 43210
(614) 292-7700

Leslie Brady
Research Assistant
11201 St. Rt. 362
Minster, Ohio 45865
(419) 628-2239

March 21, 1988

^F1^
^F2^
^F3^

Dear ^F4^:

I am writing to you about Ohio State's study of how principals of secondary schools work with the central office and community. Your completed questionnaire has not been received.

About 80% of the questionnaires have been returned, a very encouraging rate of response. The goal is to reach a 90% response rate, set for a very important reason.

The preliminary analysis shows that the responses received most recently are different from the responses received earlier. YOUR response is needed to gain an accurate understanding of how principals of secondary schools work with the central office and the community.

This mailing is being sent by certified mail to insure delivery. A replacement questionnaire is enclosed. Please complete and return it as quickly as possible.

You may be assured of complete confidentiality. Your name will never be associated with your responses.

I know that you are a busy person. I value the time and attention spent on this questionnaire. Your contribution to the success of this study is greatly appreciated.

Please write or call if you have any questions or concerns. The information is below.

Thank you for your assistance.

Sincerely,

Leslie Brady
Ohio State Research Assistant
11201 St. Rt. 362
Minster, Ohio 45865
(419) 628-2239

April 6, 1988

^F1^
^F2^
^F3^

Dear ^F4^:

This mailing is in response to our phone conversation today. Thank you for your willingness to participate. We truly value your response, and look forward to receiving it.

Enclosed you will find the promised questionnaire with mailing envelope. Please make certain you use this envelope rather than one from a previous mailing, due to the increase in postage.

We ask that you complete as much as you can of this either today or tomorrow. We want to proceed with the study, and are awaiting your response.

Thanks for your professional support.

Sincerely,

Leslie Brady
Research Assistant
11201 St. Rt. 362
Minster, Ohio 45865
(419) 628-2239

THANK YOU LETTER

December 30, 1988

^F1^
^F2^
^F3^

Dear ^F4^:

Last February/March we asked you for your opinion of how principals in secondary schools in Ohio work with the central office and the community. To thank you for completing the questionnaire, we promised you a complimentary copy of The Handbook for Developing Public Confidence in Schools, as enclosed.

Ninety percent of the people responded. The information looks very promising. The information is being studied and compiled. Your request for a copy of the results will be honored as the information is completed.

Thank you for your assistance.

Sincerely,

Leslie Brady
Ohio State Research Assistant
11201 St. Rt. 362
Minster, Ohio 45865
(419) 628-2239